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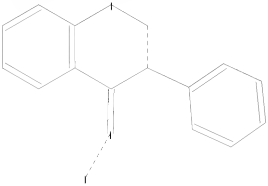

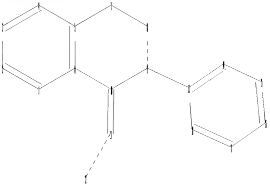

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11
ring nodes :
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ring/chain nodes :
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chain bonds :
9-13 10-11 11-12
ring bonds :
1-2 1-6 2-3 3-4 4-5 5-6 5-7 6-10 7-8 8-9 9-10 13-14 13-18 14-15 15-16 16-17 17-18
exact/norm bonds :
8-9 10-11 11-12
exact bonds :
5-7 6-10 7-8 9-10 9-13
normalized bonds :
1-2 1-6 2-3 3-4 4-5 5-6 13-14 13-18 14-15 15-16 16-17 17-18
isolated ring systems :
containing 1 : 13 :

Match level :
1:Atom 2:Atom 3:Atom 4:Atom 5:Atom 6:Atom 7:Atom 8:Atom 9:Atom 10:Atom
11:CLASS 12:CLASS 13:Atom 14:Atom 15:Atom 16:Atom 17:Atom 18:Atom

L1   STRUCTURE UPLOADED

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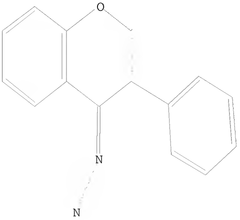
L1 HAS NO ANSWERS
L1   STR



Structure attributes must be viewed using STN Express query preparation.

=> s l1 full
FULL SEARCH INITIATED 15:32:36 FILE 'REGISTRY'
FULL SCREEN SEARCH COMPLETED -   101 TO ITERATE

100.0% PROCESSED   101 ITERATIONS   37 ANSWERS
SEARCH TIME: 00.00.01

L2   37 SEA SSS FUL L1

=> file ca

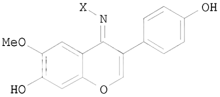
=> s l2
L3   12 L2

=> d ibib abs fhitstr 1-12

L3   ANSWER 1 OF 12 CA COPYRIGHT 2008 ACS on STN
ACCESSION NUMBER: 149:448215 CA
TITLE: Preparation of 6-methoxy-4',7-dihydroxyisoflavone derivs. as antitumor agents
INVENTOR(S):   Zhang, Qian; Ren, Yi; Li, Hanbin
PATENT ASSIGNEE(S):   Fudan University, Peop. Rep. China
SOURCE: Faming Zhuanli Shenqing Gongkai Shuomingshu, 11pp.
                         CODEN: CNXXEV
DOCUMENT TYPE: Patent
LANGUAGE: Chinese
FAMILY ACC. NUM. COUNT: 1
PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
CN 101265249	A	20080917	CN 2008-10034474	20080311
PRIORITY APPLN. INFO.:			CN 2008-10034474	20080311

GI



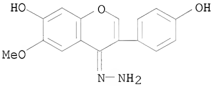
I

AB Title compds. [I; wherein X = OH, NH2, R, OR, NHR, OCOR, NHCOR, NHSO2R; R = (un)substituted alkyl, alkenyl, or aryl, etc.], were prepared as antitumor agents. Thus, the invention compound I (X = OMe) was prepared by condensation of 6-methoxy-4',7-dihydroxyisoflavone with NH2OMe in 66.7% yield.

IT 1068661-28-8P
RL: PAC (Pharmacological activity); RCT (Reactant); SPN (Synthetic preparation); THU (Therapeutic use); BIOL (Biological study); PREP (Preparation); RACT (Reactant or reagent); USES (Uses)
(preparation of 6-methoxy-4',7-dihydroxyisoflavone derivs. as antitumor agents)

RN 1068661-28-8 CA

CN 4H-1-Benzopyran-4-one, 7-hydroxy-3-(4-hydroxyphenyl)-6-methoxy-, hydrazone (CA INDEX NAME)



L3 ANSWER 2 OF 12 CA COPYRIGHT 2008 ACS on STN

ACCESSION NUMBER: 140:406680 CA

TITLE: Preparation of aminated isoflavonoid derivatives for use in pharmaceutical compositions

INVENTOR(S): Kelly, Graham Edmund; Heaton, Andrew; Faragalla, Jane; Bremner, John

PATENT ASSIGNEE(S): Novogen Research Pty. Ltd., Australia

SOURCE: PCT Int. Appl., 60 pp.
CODEN: PIXXD2

DOCUMENT TYPE: Patent

LANGUAGE: English

FAMILY ACC. NUM. COUNT: 1

PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
WO 2004039793	A1	20040513	WO 2003-AU1446	20031103

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             CN, CO, CR, CU, CZ, DE, DK, DM, DZ, EC, EE, EG, ES, FI, GB, GD,
             GE, GH, GM, HR, HU, ID, IL, IN, IS, JP, KE, KG, KP, KR, KZ, LC,
             LK, LR, LS, LT, LU, LV, MA, MD, MG, MK, MN, MW, MX, MZ, NI, NO,
             NZ, OM, PG, PH, PL, PT, RO, RU, SC, SD, SE, SG, SK, SL, SY, TJ,
             TM, TN, TR, TT, TZ, UA, UG, US, UZ, VC, VN, YU, ZA, ZM, ZW
         RW: BW, GH, GM, KE, LS, MW, MZ, SD, SL, SZ, TZ, UG, ZM, ZW, AM, AZ,
             BY, KG, KZ, MD, RU, TJ, TM, AT, BE, BG, CH, CY, CZ, DE, DK, EE,
             ES, FI, FR, GB, GR, HU, IE, IT, LU, MC, NL, PT, RO, SE, SI, SK,
             TR, BF, BJ, CF, CG, CI, CM, GA, GN, GQ, GW, ML, MR, NE, SN, TD, TG
     CA 2504653            A1    20040513    CA 2003-2504653        20031103
     AU 2003277969         A1    20040525    AU 2003-277969         20031103
     EP 1556368            A1    20050727    EP 2003-769053         20031103
         R:  AT, BE, CH, DE, DK, ES, FR, GB, GR, IT, LI, LU, NL, SE, MC, PT,
             IE, SI, LT, LV, FI, RO, MK, CY, AL, TR, BG, CZ, EE, HU, SK
     CN 1708490            A     20051214    CN 2003-80102565       20031103
     JP 2006513997         T     20060427    JP 2004-547289         20031103
     NZ 539034             A     20080430    NZ 2003-539034         20031103
     MX 2005PA04526        A     20050726    MX 2005-PA4526         20050427
     NO 2005002524         A     20050526    NO 2005-2524           20050526
     US 20060100238        A1    20060511    US 2005-532074         20051128
PRIORITY APPLN. INFO.:                       AU 2002-952453     A   20021101
                                             WO 2003-AU1446     W   20031103
OTHER SOURCE(S):         MARPAT 140:406680
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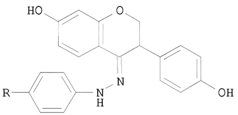
GI


I

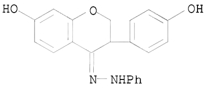
AB Aminated isoflavonoids, such as I [R = H, NO2, Me], were synthesized by aminating the 4-keto group of an isoflavanone. Claimed uses for these aminated isoflavanoids include treatment, prevention or amelioration of diseases associated with aberrant cell survival, aberrant cell proliferation, abnormal cellular migration, abnormal angiogenesis, abnormal estrogen/androgen balance, dysfunctional or abnormal steroid genesis, degeneration including degenerative changes within blood vessel walls, inflammation and immunol. imbalance and for inducing apoptosis in cells expressing abnormal prosurvival phenotype, inhibiting migration of cells having an abnormal cellular migration phenotype, and inhibiting angiogenesis in tissue expressing aberrant angiogenic phenotype. Thus, isoflavonoid I (R = H) was prepared by reacting dihydrodaidzein with phenylhydrazine hydrochloride using NaOAc in MeOH. The prepared isoflavonoid derivs. were assayed for cytotoxicity against cancer cell lines, such as prostate LNCaP and DU-145 and lung carcinoma NCI-H460, for androgen inhibition, for inhibition of thromboxane synthase and COX.

IT 688358-33-0P

RL: PAC (Pharmacological activity); SPN (Synthetic preparation); THU (Therapeutic use); BIOL (Biological study); PREP (Preparation); USES (Uses)
(preparation of aminated isoflavonoid derivs. for use in pharmaceutical compns.)

RN 688358-33-0 CA

CN 4H-1-Benzopyran-4-one, 2,3-dihydro-7-hydroxy-3-(4-hydroxyphenyl)-, 2-phenylhydrazone (CA INDEX NAME)



L3 ANSWER 3 OF 12 CA COPYRIGHT 2008 ACS on STN

ACCESSION NUMBER: 114:228735 CA
ORIGINAL REFERENCE NO.: 114:38577a,38580a
TITLE: Preparation of indenylidene- and heterocyclylidene(phenylaminocarbonyl)hydrazines as anthropodicides
INVENTOR(S): Daub, John Powell; Lahm, George Philip; Marlin, Bradford Senn
PATENT ASSIGNEE(S): du Pont de Nemours, E. I., and Co., USA
SOURCE: Eur. Pat. Appl., 159 pp.
CODEN: EPXXDW
DOCUMENT TYPE: Patent
LANGUAGE: English
FAMILY ACC. NUM. COUNT: 1
PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
EP 377304	A2	19900711	EP 1989-313369	19891220
EP 377304	A3	19900725		
EP 377304	B1	19940309		
R: GR				
CA 2005740	A1	19900627	CA 1989-2005740	19891215
WO 9007495	A1	19900712	WO 1989-US5597	19891220
W: AU, BB, BG, BR, DK, FI, HU, JP, KR, LK, MC, MG, MW, NO, RO, SD, SU, US				
RW: AT, BE, BF, BJ, CF, CG, CH, CM, DE, ES, FR, GA, GB, IT, LU, ML, MR, NL, SE, SN, TD, TG				
AU 9050246	A	19900801	AU 1990-50246	19891220
AU 632093	B2	19921217		
EP 452406	A1	19911023	EP 1990-902098	19891220
R: AT, BE, CH, DE, ES, FR, GB, IT, LI, LU, NL, SE				
BR 8907842	A	19911203	BR 1989-7842	19891220
HU 58695	A2	19920330	HU 1990-1521	19891220
AT 102606	T	19940315	AT 1989-313369	19891220
ES 2062049	T3	19941216	ES 1989-313369	19891220
RU 2067092	C1	19960927	RU 1989-4895829	19891220
CN 1043935	A	19900718	CN 1989-109410	19891223
IL 92870	A	19940530	IL 1989-92870	19891225

ZA 8909916	A	19910828	ZA 1989-9916		19891227
WO 9107382	A1	19910530	WO 1990-US3347		19900620
W: JP, KR					
JP 05501556	T	19930325	JP 1990-515832		19900620
JP 2894363	B2	19990524			
JP 04502472	T	19920507	JP 1990-502795		19901219
US 5182303	A	19930126	US 1991-689042		19910520
DK 9101219	A	19910621	DK 1991-1219		19910621
US 5268388	A	19931207	US 1992-971008		19921102
US 5428027	A	19950627	US 1993-142568		19931028
PRIORITY APPLN. INFO.:			US 1988-290404	A	19881227
			US 1989-436361	A	19891113
			EP 1989-313369	A	19891220
			WO 1989-US5597	A	19891220
			WO 1990-US3347	W	19900620
			US 1991-689042	A3	19910520
			US 1992-971008	A3	19921102

OTHER SOURCE(S): CASREACT 114:228735; MARPAT 114:228735

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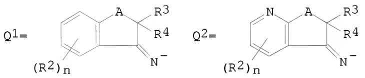

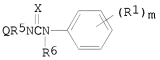

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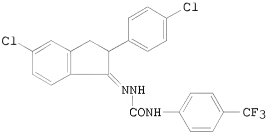


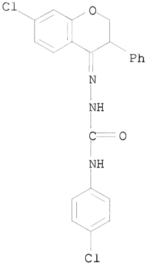
II

AB The title compds. I [Q = Q1, Q2, etc.; A = O, OCH2, (CH2)t, etc.; t = 0-3; R1,R2 = halo, NO2, N3, SCN, etc.; R3 = H, C1-6 alkyl, haloalkyl, C4-6 alkylcycloalkyl, C2-6 alkenyl, haloalkenyl, alkynyl, etc.; R5, R6 = H, C1-22 alkyl, C2-22 alkoxyalkyl, alkylcarbonyl, etc.; X = O, S; m = 1-5; n = 1-4], were prepared Condensation of 5-chloro-2-(4-chlorophenyl)-2,3-dihydro-1H-inden-1-one with hydrazine hydrate in EtOH, followed by reaction with 4-trifluoromethylphenyl isocyanate, gave hydrazinecarboxamide II. II at 0.55 kg/ha gave complete kill of Spodoptera frugiperda larvae.

IT 131210-14-5P
RL: SPN (Synthetic preparation); PREP (Preparation)
(preparation of, as arthropodicide)

RN 131210-14-5 CA

CN Hydrazinecarboxamide, 2-(7-chloro-2,3-dihydro-3-phenyl-4H-1-benzopyran-4-ylidene)-N-(4-chlorophenyl)- (CA INDEX NAME)



L3 ANSWER 4 OF 12 CA

ACCESSION NUMBER: 77:19487 CA
ORIGINAL REFERENCE NO.: 77:3265a,3268a
TITLE: cis-3-Methylflavanones
AUTHOR(S): Donnelly, D. M. X.; Keenan, A. K.; Leahy, T.; Philbin, E. M.; Janzso, G.; Kallay, F.; Koczar, I.
CORPORATE SOURCE: Dep. Chem., Univ. Coll., Dublin, UK
SOURCE: Tetrahedron (1972), 28(9), 2545-51
CODEN: TETRAB; ISSN: 0040-4020
DOCUMENT TYPE: Journal
LANGUAGE: English

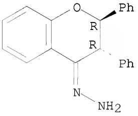
AB A simple high yield preparation of cis-3-methylflavanones is described and the stereochemistry of the intermediate 4-hydroxyiminoflavans is discussed.

IT 36944-54-4P
RL: SPN (Synthetic preparation); PREP (Preparation)
(preparation of)

RN 36944-54-4 CA

CN 4H-1-Benzopyran-4-one, 2,3-dihydro-2,3-diphenyl-, hydrazone, trans- (9CI) (CA INDEX NAME)

Relative stereochemistry.
Double bond geometry unknown.



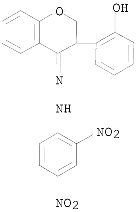
L3 ANSWER 5 OF 12 CA COPYRIGHT 2008 ACS on STN
ACCESSION NUMBER: 65:82115 CA
ORIGINAL REFERENCE NO.: 65:15311e-h,15312a-e
TITLE: Oxygen heterocycles. VIII. Synthesis of dl-homopterocarpin
AUTHOR(S): Suginome, Hiroshi; Iwadare, Tsukasa
CORPORATE SOURCE: Hokkaido Univ., Sapporo
SOURCE: Bulletin of the Chemical Society of Japan (1966), 39(7), 1535-41
CODEN: BCSJA8; ISSN: 0009-2673
DOCUMENT TYPE: Journal
LANGUAGE: English
GI For diagram(s), see printed CA Issue.
AB cf. preceding abstract The synthesis of the chromanocoumaran I (R = R1 = R2 = H) (II), the skeleton of pterocarpinoids, is described. This method which follows a plausible biogenetic pathway was extended to the synthesis of the title compound,I(R = R2 = MeO, R1 = H) (III). On the basis of the synthetic route and the N.M.R. spectra, a cis B/C ring junction was assigned to I. KCN (1 g.) and 6 g. o-MeOCH2OC6H4CHO, b5 112.5-15.5°, heated 2 hrs. on a water bath gave 2 g. oily mixture, b0.05 176-86°, of 2,2'-bis(methoxymethoxy)benzoin (IV) and (o-MeOCH2OC6H4CO)2 (V) which deposited on standing crystalline V, m. 107-7.5° (80% EtOH). IV-V mixture (1.7 g.) in 12 cc. 50% AcOH containing 0.05 g. H2SO4 refluxed 15 min. and poured into iced H2O containing 6 g. Na2CO3 yielded 0.6 g. 2,2'-dihydroxybenzoin (VI), m. 161-3° (C6H6); the filtrate gave yellow (o-HOC6H4CO)2 (VII), m. 156-7° (80% EtOH). VII (0.5 g.) in 20 cc. Me2CO refluxed 20 hrs. with 1.5 g. Na2CO3 and 0.5 g. Me2SO4 yielded (o-MeOC6H4CO)2 (VIII), m. 127-83° (80% EtOH); quinoxaline derivative m. 181.5-2.0°. VI (14 g.) in 90 cc. 50% EtOH and 150 cc. 15% aqueous KOH refluxed 8 hrs. with 40 g. Zn dust, filtered, and neutralized with 2N HCl gave 9.3 g. 2,2'-dihydroxydeoxybenzoin, (IX)m. 102-3° (C6H6); the filtrate yielded 2-(o-hydroxyphenyl)coumarone, (X) m. 95-5.5° (80% EtOH). IX (8 g.) in 280 cc. HCO2Et added dropwise to 11 g. powdered Na with cooling and kept 3 days at --5° gave 6.3 g. XI (R = R1 = R2 = H) (XII),m. 153-4° (MeOH). XII (2 g.) in 110 cc. AcOH hydrogenated over Pt catalyst gave XIII (R = R1 = R2 = H) (XIV), m. 118-22° (80% EtOH); 2,4-dinitrophenyl-hydrazone, red, m. 223° (decomposition). XII (0.2 g.) in 20.3 g. Et2O-Me2CO mixture treated 24 hrs. with CH2N2-Et2O from 1.5 g. H2NCON(NO)Me yielded 0.05 g. XI (R = Me, R1 = R2 = H). XIV (1 g.) and 0.5 g. H2SO4 in 100 cc. 50% AcOH refluxed 1 hr. gave 0.55g. XV(R= R1 = H), m. 87-9°(EtOH). XII(1 g.) in 100 cc. dry dioxane stirred 1 hr. at 60-5° with 200 mg. NaBH4 in 7.5 cc. 95% EtOH and stirred overnight gave 0.8 g. oily XVI (R = R1 = R2 = H) (XVII). XVII (0.2 g.) in 20 cc. 50% AcOH refluxed 1 hr. gave 125 mg. II, m. 126-7° (EtOH). 2,4-(MeO)2C6H3CH2CN (25 g.) and 35.5 g. m-C6H4(OH)2 with 249 mg. ZnCl2 in 630 cc. dry Et2O gave 25.2 g. 2,4-dihydroxy-2',4'-di- methoxydeoxybenzoin (XVIII), m. 152-3°. XVIII (23.8 g.) and 7.7 cc. MeI in 450 cc. Me2CO refluxed 70 min. with 30 g. K2CO3 gave 12.7 g. 4-Me ether (XIX) of XVIII, m. 109-13° (70% EtOH), and 0.9 g. 2,4-dimethyl ether of XVIII, m. 73.5-4.0°. XVIII (6.6 g.) in 178 cc. HCO2Et added dropwise during 0.5 hr. at --5° to 6 g. powdered Na and kept 55 hrs. at 0° yielded 13.68 g. 2-hydroxy-7,2',4'-trimethoxyisoflavanone (XX), m. 149-50° (aqueous EtOH). XX (11.8 g.) in 100 cc. AcOH refluxed 0.5 hr. yielded 7.8 g. XI (R = Me, R1 = R2 = MeO) (XXI), m. 149-50° (aqueous EtOH). XXI (0.5 g.) in 60 cc. C6H6 refluxed 2 hrs. with 5.5 g. AlCl3 gave 0.42 g. XI (R = H, R1 = R2 = OH) (XXII), m. 272° (decomposition) (MeOH); XI (R = Ac, R1 = R2 =

AcO), 70%, m. 148-50° (80% EtOH). XXII (1 g.) and 1 g. MeI in 100 cc. Me2CO stirred 10 hrs. with 2 g. K2CO3 at 30-40° yielded 767 mg. 7-Me ether (XXIII) of XXII.H2O, m. 207-8° (80% EtOH). XXII (49 mg.) in 10 cc. Me2CO treated 1480 min. with CH2N2Et2O from 80 mg. H2NCON(NO)Me gave 27 mg. yellow XXIII, m. 206-7° (80% EtOH). NaBH4 (200 mg.) in 25 cc. 95% EtOH added dropwise to 680 mg. XXIII in 45 cc. dioxane at 60-5° and kept 1 hr. 60-5° gave 457mg. oily XVI (R = H, R1 = OH, R2 = MeO) (XXIV). XXIV refluxed 1 hr. with 11 cc. 50% aqueous AcOH and evaporated and the residue refluxed 3 hrs. with 4 g. MeI and 2 g. K2CO3 in 20 cc. Me2CO yielded 219 mg. light yellow oil which treated with C and then chromatographed on Al2O3 gave 36 mg. III, m. 123-5° (EtOH). The uv spectra of II, XVI, XXIII, and 7-hydroxyisoflavone are recorded.

IT 7622-46-0P, Isoflavanone, 2'-hydroxy-, (2,4-dinitrophenyl)hydrazone
RL: PREP (Preparation)
(preparation of)

RN 7622-46-0 CA

CN Isoflavanone, 2'-hydroxy-, (2,4-dinitrophenyl)hydrazone (7CI, 8CI) (CA INDEX NAME)



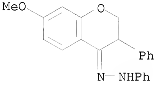
L3 ANSWER 6 OF 12 CA

ACCESSION NUMBER: 58:33237 CA
ORIGINAL REFERENCE NO.: 58:5619c-e
TITLE: Studies on synthetic isoflavanones. II. Synthesis of isoflavanones from 3-hydroxyisoflavanones
AUTHOR(S): Inoue, Naoto
SOURCE: Sci. Repts. Tohoku Univ., First Ser. (1961), 45(No. 1), 68-72
DOCUMENT TYPE: Journal
LANGUAGE: Unavailable

AB The yield of the catalytic hydrogenation of unsubstituted or monosubstituted isoflavones (cf. preceding abstract) to isoflavanones was unsatisfactory. The following isoflavanones were prepared by methods of higher yields. 3-Hydroxy-7-methoxyisoflavanone (I) was prepared from the cyanohydrin of ω-m-methoxyphenoxyacetophenone by the Hoesch reaction (m. 133°, yield 63%); 3Ac derivative (II) m. 105°, yield 94%. 7-Methoxyisoflavanone (III) was prepared by Zn reduction of either I or II (m. 91°, 42% from I and 94% from II). 3,7-Dihydroxyisoflavanone (IV) was prepared from the cyanohydrin of ω-m-hydroxyphenoxyacetophenone by

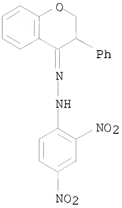
the Hoesch reaction (m. 203°, yield 46%). 7-Acetoxyisoflavanone was prepared by treating 3,7-diacetoxyisoflavanone with Zn dust in 70% aqueous acetic acid. 7-Hydroxyisoflavanone was prepared either by Zn reduction of IV (yield 32%) or by demethylation of III in Ac2O and HI (yield 53%, m. 175°).

IT 100435-21-0P, Isoflavanone, 7-methoxy-, phenylhydrazone
RL: PREP (Preparation)
(preparation of)
RN 100435-21-0 CA
CN 4H-1-Benzopyran-4-one, 2,3-dihydro-7-methoxy-3-phenyl-, 2-phenylhydrazone (CA INDEX NAME)

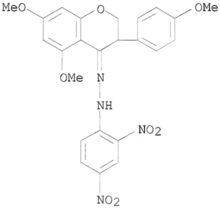


L3 ANSWER 7 OF 12 CA
ACCESSION NUMBER: 58:33236 CA
ORIGINAL REFERENCE NO.: 58:5619a-c
TITLE: Studies on synthetic isoflavanones. I. Synthesis of isoflavanones by catalytic hydrogenation of isoflavones
AUTHOR(S): Inoue, Naoto
SOURCE: Sci. Repts. Tohoku Univ., First Ser. (1961), 45(No. 1), 63-7
DOCUMENT TYPE: Journal
LANGUAGE: Unavailable
GI For diagram(s), see printed CA Issue.
AB PtO2 (0.1 to 0.5 g.) in 20 to 30 ml. HOAc was shaken with H under atmospheric pressure at room temperature When the absorption of H stopped a solution of 1 to 5 g. isoflavone in 60 to 130 ml. HOAc was added, the shaking repeated, and the hydrogenation stopped when 1.1 to 1.2 moles was absorbed. From the corresponding isoflavone were prepared I (R, R1, R2, R3, m.p. and m.p. 2,4-dinitrophenylhydrazone given): H, H, H, H, 77°, 209°; OH, H,H, H, 175°, 245°; OMe, H, H, H, 92°, 213°; AcO, H, H, H, 108.5°, --; H, OH, H, H, 115°, 236°; H, OMe, H, H, 108°, 219°; H, AcO, H, H, 95.5 24°, --; Oil, H, OMe, H, 197°, 254°; AcO, H, OMe, H, 150°, --; OH, H, (R23 =) CH2O2, 197°, 240°; OMe, H, (R2R3 =) CH2O2, 120°, --; AcO, H, (R2R3 =) CH2O2, 159.5°, --. Also prepared was 5,7-dimethoxyisoflavanone, m. 151°; 2,4-dinitrophenylhydrazone m. 254°.

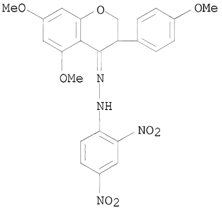
IT 89286-01-1P, Isoflavanone, (2,4-dinitrophenyl)hydrazone
RL: PREP (Preparation)
(preparation of)
RN 89286-01-1 CA
CN 4H-1-Benzopyran-4-one, 2,3-dihydro-3-phenyl-, 2-(2,4-dinitrophenyl)hydrazone (CA INDEX NAME)



L3 ANSWER 8 OF 12 CA
ACCESSION NUMBER: 55:118498 CA
ORIGINAL REFERENCE NO.: 55:22302a-b
TITLE: Leucoanthocyanins
AUTHOR(S): Lebreton, Philippe
CORPORATE SOURCE: Fac. sci., Lyon, Fr.
SOURCE: Bulletin de l'Association Francaise des Chimistes des Industries du Cuir et Documents Scientifiques et Techniques des Industries du Cuir (1961), 23, 91-125
CODEN: BAFCAA; ISSN: 0365-8813
DOCUMENT TYPE: Journal
LANGUAGE: Unavailable
AB A review with 227 references.
IT 122701-70-6P, Isoflavanone, 4',5,7-trimethoxy-, (2,4-dinitrophenyl)hydrazone
RL: PREP (Preparation)
(preparation of)
RN 122701-70-6 CA
CN 4H-1-Benzopyran-4-one, 2,3-dihydro-5,7-dimethoxy-3-(4-methoxyphenyl)-, 2-(2,4-dinitrophenyl)hydrazone (CA INDEX NAME)

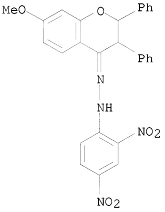


L3 ANSWER 9 OF 12 CA COPYRIGHT 2008 ACS on STN
ACCESSION NUMBER: 55:118497 CA
ORIGINAL REFERENCE NO.: 55:22301i,22302a
TITLE: Components of the bark of Prunus puddum. III. Synthesis of padmakastein and its derivatives
AUTHOR(S): Ramanujam, S.; Seshadri, T. R.
CORPORATE SOURCE: Univ. Delhi
SOURCE: Proceedings - Indian Academy of Sciences, Section A (1958), 48A, 175-9
CODEN: PISAA7; ISSN: 0370-0089
DOCUMENT TYPE: Journal
LANGUAGE: Unavailable
AB cf. CA 46, 10310e. Prunetin di-Me ether (I) (0.5 g.) hydrogenated over 0.15 g. 10% Pd-C in 200 ml. MeOH containing 1 drop concentrated HCl gave padmakastein di-Me ether (II), m. 152-4°; 2,4-dinitrophenylhydrazone m. 227°. II with SeO2 gave I. Similarly, prunetin diacetate gave padmakastein diacetate (III), m. 220-2°. III rerefluxed 0.5 hr. in alc. HCl gave padmakastein, m.p. and mixed m.p. 238-40°.
IT 122701-70-6P, Isoflavanone, 4',5,7-trimethoxy-, (2,4-dinitrophenyl)hydrazone
RL: PREP (Preparation)
(preparation of)
RN 122701-70-6 CA
CN 4H-1-Benzopyran-4-one, 2,3-dihydro-5,7-dimethoxy-3-(4-methoxyphenyl)-, 2-(2,4-dinitrophenyl)hydrazone (CA INDEX NAME)



L3 ANSWER 10 OF 12 CA COPYRIGHT 2008 ACS on STN
ACCESSION NUMBER: 54:86477 CA
ORIGINAL REFERENCE NO.: 54:16451e-f
TITLE: Synthesis of rotenoids. I. Synthesis of chromanochromanone and 2-substituted isoflavanones
AUTHOR(S): Fukami, Hiroshi; Takahashi, Shozo; Konishi, Kazuo; Nakajima, Minoru
CORPORATE SOURCE: Univ. Kyoto
SOURCE: Bulletin of the Agricultural Chemical Society of Japan (1960), 24, 119-22
CODEN: BACOAV; ISSN: 0375-8397

DOCUMENT TYPE: Journal
LANGUAGE: Unavailable
AB By catalytic hydrogenation of the corresponding isoflavones were obtained the following 6 new 2-substituted isoflavanones: 2-methyl-7-methoxy-, m. 122-2.5°; 2-carbomethoxy-7-methoxy-, m. 140-1°; 2-carbethoxy-7-methoxy-, m. 100-1°; 2-phenyl-7-methoxy-(2,3-diphenyl-7-methoxy-chromanone), m. 128-9°; 2-hydroxymethyl-7-methoxy-, m. 156-8°, and 2-hydroxymethyl-7,2'-dimethoxy-, m. 179-81°; 2,4-dinitrophenylhydrazones, m. 200°, 240°, 230.5-32°, 254-5°, 203-4°, and 249-51°, resp. The position of the carbonyl bond of the isoflavanones in infrared spectra were: 1667, 1678, 1678, 1678, 1672, and 1653 cm:-1, resp.
IT 115001-28-0
RL: PREP (Preparation)
(Derived from data in the 6th Collective Formula Index (1957-1961))
RN 115001-28-0 CA
CN 4H-1-Benzopyran-4-one, 2,3-dihydro-7-methoxy-2,3-diphenyl-, 2-(2,4-dinitrophenyl)hydrazone (CA INDEX NAME)



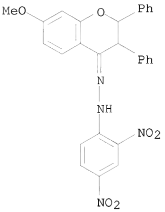
L3 ANSWER 11 OF 12 CA
ACCESSION NUMBER: 54:86476 CA
ORIGINAL REFERENCE NO.: 54:16450f-i,16451a-e
TITLE: Vitamins and antivitamins K. VIII. Tautomerism of 3,3'-methylenebis(2,4-pyrandiones)
AUTHOR(S): Cieslak, Jerzy; Chmielewska, Irena
CORPORATE SOURCE: Univ. Warsaw
SOURCE: Roczniki Chemii (1956), 30, 825-40
CODEN: ROCHAC; ISSN: 0035-7677
DOCUMENT TYPE: Journal
LANGUAGE: English
GI For diagram(s), see printed CA Issue.
AB The tautomerism of 3,3'-methylenebis(6-methyl-2,4-pyrandione) (I) was investigated with the ethers of its enol forms of the γ-pyrone type (CO.CH:CMe.O.COR:C-) and α-pyrone type (-C:COR.CH:CMe.O.CO). Methylation of I in Et2O suspension with an excess of CH2N2 (II) yielded, after 24 hrs. at room temperature, crystals of the 4,4'-dimethoxy derivative of I (III), m. 199-201° (Me2CO), λ 250 and 295 μm. (log

ε 3.35 and 4.14, resp.). The filtrate from III was saturated with dry HCl to precipitate the 2-methoxy-4-hydroxy derivative of I.HCl (IV.HCl), m. 90-5° (decomposition to MeCl and I); with Et2NH it gave IV, an orange vitreous product, purified by repeated precipitation with petr. ether from a C6H6 solution An inner-salt structure of IV was assumed, as tests for OH were neg. and methylation attempts with (II) failed. The 4-methoxy-4'-hydroxy derivative of I (V), m. 147-9° (C6H6-petr. ether), λ 245 and 295 μm. (log ε 3.48 and 4.20, resp.), was prepared by treating I in methanolic NaOH (1 equivalent) with II in Et2O, removing Et2O after 24 hrs., acidifying the residue, concentrating in vacuo, and extracting the product with C6H6; further methylation of V gave III. Similarly, I treated with MeCHN2 gave the 4-ethoxy-4'-hydroxy derivative of I (VI), m. 138-9° (aqueous Me2CO), which ethylated further yielded the 4,4'-diethoxy derivative of I, m. 177-9° (aqueous Me2CO). Ethylation of V and methylation of VI both yielded the same 4-methoxy-4'-ethoxy derivative of I (VII), m. 145-7°, (aqueous Me2CO), whereby it was proved that III had the α,α'- and not γ,γ'-pyrone structure suggested by Borsche and Blount (CA 26, 4048). Thus, the same α,α'-pyrone structure was also proved for V, VI, and VII. To explain why I on methylating gave equal amts. of III and IV, i.e. α,α'- and α,γ'-pyrone structures, resp., I was assumed to have a dipole structure, whereby the 2- or 4-methylation became equally possible. Similar investigations were carried out with dicoumarol (VIII), which was etherified to mono-Me ether (IX), m. 172-4° (aqueous MeOH), mono-Et ether (X), m. 174-6° (aqueous MeOH), di-Et ether (XI), m. 183-5° (dilute alc.), and mixed Me-Et ether of VIII (XII), m. 127-8° (aqueous Me2CO), all being similarly proved to have an α,α'-pyrone, i.e. biscoumarin structure. The results contradicted the coumarin-chromone structural concept of Fucik and Kor.acte.istek (CA 47, 8741a), as well as the dichromone structure suggested by Knobloch and Proch.acte.azka (CA 49, 1027d). IX was prepared in 4 ways to eliminate the possibility of the formation of some isomers thereof according to the exptl. conditions. (1) Acid demethylation of di-Me ether of VIII (XIII): 1.2 g. XIII in 60 ml. MeOH containing 10% HCl was warmed 14 hrs. at 60-5°, diluted to 200 ml. with H2O, the precipitate extracted repeatedly with 1% KOH and then with boiling MeOH (2 + 50 ml.), and the MeOH extract diluted with H2O to give 0.3 g. IX. (2) Alkaline demethylation of XIII: 2 g. XIII was dissolved in 25 ml. 10% KOH in MeOH, boiled 3 min., cooled, and the precipitate decomposed by adding HCl to yield 1 g. IX. (3) Methylation of VIII: 1 g. VIII in 25 ml. 2% NaOH was treated dropwise with shaking with 3.2 g. Me2SO4 (1 hr.), warmed gently, the precipitate boiled with 50 ml. MeOH and filtered, and the filtrate diluted with H2O to give 0.3 g. IX. (4) Methylation of Na VIII: 3.36 g. VIII in 100 ml. MeOH containing 0.4 g. NaOH was treated with an excess II, after 24 hrs. the mixture filtered, the filtrate concentrated to 25 ml. and then diluted with H2, and the precipitate acidified to yield 2 g. IX. X, XI, and XII were prepared analogously following the path (4).

IT 115001-28-0
(Derived from data in the 6th Collective Formula Index (1957-1961))

RN 115001-28-0 CA

CN 4H-1-Benzopyran-4-one, 2,3-dihydro-7-methoxy-2,3-diphenyl-, 2-(2,4-dinitrophenyl)hydrazone (CA INDEX NAME)



L3 ANSWER 12 OF 12 CA COPYRIGHT 2008 ACS on STN
ACCESSION NUMBER: 48:28778 CA
ORIGINAL REFERENCE NO.: 48:5186g-i,5187a-d
TITLE: Chemistry of subterranean clover. II. Synthesis and reduction of isoflavones related to genistein and formononetin
AUTHOR(S): Bradbury, R. B.; White, D. E.
CORPORATE SOURCE: Univ. Western Australia, Nedlands
SOURCE: Journal of the Chemical Society (1953) 871-6
CODEN: JCSOA9; ISSN: 0368-1769
DOCUMENT TYPE: Journal
LANGUAGE: Unavailable

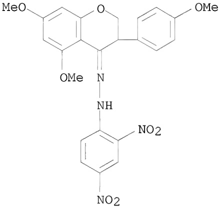
AB cf. C.A. 46, 8652i. Isoflavones, their Me and acyl derivs., isoflavanones, isoflavanols, and isoflavenes were prepared for study of their estrogenic activity. (All m.ps. are corrected) 7-Acetoxy-4'-methoxy-2-methylisoflavone (I), m. 197°, on hydrolysis gave the 7-HO compound, m. 286-7°, and on demethylation the 4',7-di-HO compound (II), m. 322-3°. CH2N2 and II formed the di-Me ether, m. 170-1°. II (0.89 g.) with Ac2O gave 1.0 g. 4',7-diacetate (III), m. 193-4° (from EtOH). I (0.78 g.) in AcOH with PtO2 and H at 1 atmospheric yielded 0.21 g. of the isoflavanone, needles, m. 176-8° (from EtOH). I on full hydrogenation afforded the isoflavan-4-ol compound, m. 88-9° (with 1 mol. of EtOH of crystallization) (from EtOH), light absorption maximum 275 mμ (ε 4200); it lost the mol. of EtOH at 88° in vacuo and then m. 112-13°. III (1.0 g.) on reduction furnished 0.33 g. isoflavanone, m. 157-8° (from EtOH), which on alcoholysis yielded 4',7-dihydroxy-2-methylisoflavanone, m. 266° (from EtOH). III when fully reduced and subsequently purified by chromatographing gave the isoflavan-4-ol compound, prisms, m. 139° (from petr. ether-EtOH). 4',7-Dimethoxy-2-methylisoflavone (IV) (1.71 g.) on reduction gave 36.2 mg. of the isoflavanone, needles, m. 158° (from Me2CO), light absorption maximum 312.5 mμ (ε 7600) and 272.5 mμ (ε 16340), and the isoflav-3-ene compound (0.44 g.), m. 128° (from EtOH), light absorption maximum 330 mμ (ε 22820) and 246 mμ (ε 14430), which was also obtained by LiAlH4 reduction of IV. p-[2,4-(HO)2C6H3]COCH2C6H4OMe (2.0 g.), 2.0 g. EtCO2Na, and 15 ml. (EtCO)2O refluxed 16 hrs. yielded 1.58 g. 2-ethyl-4'-methoxy-7-propionoxyisoflavone (V), m. 122° (from EtOH).

V with HI afforded 2-ethyl-4',7-dihydroxyisoflavone, rhombic prisms, m. 278-9° (from EtOH). p-[2,4,6-(HO)3C6H2]COCH2C6H4OMe (2.0 g.), 2.5 g. EtCO2Na, and 15 ml. (EtCO)2O heated 17 hrs. at 180-5° yielded 1.521 g. 2-ethyl-4'-methoxy-5,7-dipropionoxyisoflavone (VI), m. 150° (from EtOH). VI was hydrolyzed with 0.5N Na2CO3 to the 5,7-di-HO compound (VII), needles, m. 228-9° (from 50% MeOH). VI or VII with HI yielded the 4',5,7-tri-HO compound, m. 244-5° (from 30% EtOH), light absorption maximum 258 mμ (ε 32582). 4',7-Dimethoxyisoflavanone (VIII), prepared by known procedure, m. 125-6° (from EtOH). VIII and MeMgI gave 4',7-di-methoxy-4-methylisoflav-3-ene, needles, m. 124-5° (from EtOH and then from Me2CO), light absorption maximum 316 mμ (ε 17470). The 4'-Et compound, prepared similarly with EtMgI, b2 194°. m. 81-2° (from EtOH), light absorption maximum 315 mμ (ε 15660). VIII (1.23 g.) on reduction yielded 50.6 mg. of the isoflav-3-ene compound, m. 160-1° (from C6H6-EtOH), light absorption maximum 335 mμ (ε 23900) and 250 mμ (ε 14660). The combined mother liquors from the preceding reduction were further hydrogenated and gave the dimorphous 4',7-dimethoxyisoflavan, needles, m. 112-13° (from EtOH), light absorption maximum 282 mμ (ε 5394). 4',5,7-Trimethoxyisoflavone (IX) (4.15 g.), HI, and HOAc refluxed 4 hrs. yielded 4',5-dihydroxy-7-methoxyisoflavone, needles, m. 241-2° (from EtOH). IX (3.12 g.) on reduction gave 2.2 g. isoflavanone, needles, m. 156-7° (from EtOH-C6H6); 2,4-dinitrophenylhydrazone, red flakes, m. 227° (from HOAc).

IT 122701-70-6P, Isoflavanone, 4',5,7-trimethoxy-, 2,4-dinitrophenylhydrazone
RL: PREP (Preparation)
(preparation of)

RN 122701-70-6 CA

CN 4H-1-Benzopyran-4-one, 2,3-dihydro-5,7-dimethoxy-3-(4-methoxyphenyl)-, 2-(2,4-dinitrophenyl)hydrazone (CA INDEX NAME)



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FULL SCREEN SEARCH COMPLETED - 3030 TO ITERATE

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100.0% PROCESSED     3030 ITERATIONS                          13 ANSWERS
SEARCH TIME: 00.00.02

L4           13 SEA SSS FUL L1

=> d ibib abs fqhit 1-13

L4   ANSWER 1 OF 13  MARPAT  COPYRIGHT 2008 ACS on STN
ACCESSION NUMBER:         149:252430  MARPAT
TITLE:                    Improvement of cognitive performance with sirtuin
                          activators
INVENTOR(S):              Sinclair, David A.; Tsai, Li-Huei; Fisher, Andre
PATENT ASSIGNEE(S):       USA
SOURCE:                   U.S. Pat. Appl. Publ., 60pp.
                          CODEN: USXXCO
DOCUMENT TYPE:            Patent
LANGUAGE:                 English
FAMILY ACC. NUM. COUNT:   2
PATENT INFORMATION:

     PATENT NO.       KIND  DATE          APPLICATION NO.  DATE
     ---------------  ----  --------      ---------------  --------
     US 20080194803    A1   20080814      US 2007-955680   20071213
     WO 2006138418     A2   20061228      WO 2006-US23239  20060614
     WO 2006138418     A3   20070913
         W:  AE, AG, AL, AM, AT, AU, AZ, BA, BB, BG, BR, BW, BY, BZ, CA, CH,
             CN, CO, CR, CU, CZ, DE, DK, DM, DZ, EC, EE, EG, ES, FI, GB, GD,
             GE, GH, GM, HR, HU, ID, IL, IN, IS, JP, KE, KG, KM, KN, KP, KR,
             KZ, LA, LC, LK, LR, LS, LT, LU, LV, LY, MA, MD, MG, MK, MN, MW,
             MX, MZ, NA, NG, NI, NO, NZ, OM, PG, PH, PL, PT, RO, RS, RU, SC,
             SD, SE, SG, SK, SL, SM, SY, TJ, TM, TN, TR, TT, TZ, UA, UG, US,
             UZ, VC, VN, ZA, ZM, ZW
         RW: AT, BE, BG, CH, CY, CZ, DE, DK, EE, ES, FI, FR, GB, GR, HU, IE,
             IS, IT, LT, LU, LV, MC, NL, PL, PT, RO, SE, SI, SK, TR, BF, BJ,
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             GM, KE, LS, MW, MZ, NA, SD, SL, SZ, TZ, UG, ZM, ZW, AM, AZ, BY,
             KG, KZ, MD, RU, TJ, TM, AP, EA, EP, OA
PRIORITY APPLN. INFO.:                        US 2005-690306P  20050614
                                              US 2005-702236P  20050725
                                              WO 2006-US23239  20060614
AB   Provided herein are methods and compns. for enhancing the cognitive
     performance of a subject in need thereof.  A method may include
     administering to a subject an agent that increases the level of protein or
     activity of a sirtuin, such as SIRT1.  Thus, resveratrol facilitated
     learning and memory.

  MSTR 3
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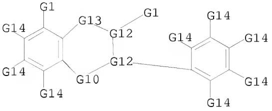
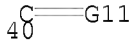


G8 = heteroaryl <containing zero or more N,
zero or more O, zero or more S> (opt. substd.)
G10 = 40



G11 = 42

G12 = 71

G13 = O
Patent location: claim 12

L4 ANSWER 2 OF 13 MARPAT COPYRIGHT 2008 ACS on STN
ACCESSION NUMBER: 145:124240 MARPAT
TITLE: Process for preparing optically active cyclic amines via hydrogenation of imines in presence of chiral catalysts
INVENTOR(S): Dietrich, Hansjorg; Ford, Mark James; Muller, Thomas; Lassaletta Simon, Jose Maria; Ros Lao, Abel; Magriz Tascon, Antonio
PATENT ASSIGNEE(S): Bayer Cropscience G.m.b.H., Germany
SOURCE: U.S. Pat. Appl. Publ., 37 pp.
CODEN: USXXCO
DOCUMENT TYPE: Patent
LANGUAGE: English
FAMILY ACC. NUM. COUNT: 1
PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
US 20060149080	A1	20060706	US 2005-320121	20051228
DE 102004063443	A1	20060713	DE 2004-102004063443	20041230
WO 2006072374	A1	20060713	WO 2005-EP13371	20051213

W: AE, AG, AL, AM, AT, AU, AZ, BA, BB, BG, BR, BW, BY, BZ, CA, CH,

CN, CO, CR, CU, CZ, DK, DM, DZ, EC, EE, EG, ES, FI, GB, GD, GE,
GH, GM, HR, HU, ID, IL, IN, IS, JP, KE, KG, KM, KN, KP, KR, KZ,
LC, LK, LR, LS, LT, LU, LV, LY, MA, MD, MG, MK, MN, MW, MX, MZ,
NA, NG, NI, NO, NZ, OM, PG, PH, PL, PT, RO, RU, SC, SD, SE, SG,
SK, SL, SM, SY, TJ, TM, TN, TR, TT, TZ, UA, UG, US, UZ, VC, VN,
YU, ZA, ZM, ZW
RW: AT, BE, BG, CH, CY, CZ, DE, DK, EE, ES, FI, FR, GB, GR, HU, IE,
IS, IT, LT, LU, LV, MC, NL, PL, PT, RO, SE, SI, SK, TR, BF, BJ,
CF, CG, CI, CM, GA, GN, GQ, GW, ML, MR, NE, SN, TD, TG, BW, GH,
GM, KE, LS, MW, MZ, NA, SD, SL, SZ, TZ, UG, ZM, ZW, AM, AZ, BY,
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EP 1833781	A1	20070919	EP 2005-823028	20051213

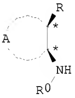
R: AT, BE, BG, CH, CY, CZ, DE, DK, EE, ES, FI, FR, GB, GR, HU, IE,
IS, IT, LI, LT, LU, LV, MC, NL, PL, PT, RO, SE, SI, SK, TR

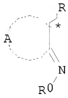
CN 101102991	A	20080109	CN 2005-80046744	20051213
JP 2008526694	T	20080724	JP 2007-548717	20051213
IN 2007CN02940	A	20070907	IN 2007-CN2940	20070702

PRIORITY APPLN. INFO.: DE 2004-102004063443 20041230
WO 2005-EP13371 20051213

OTHER SOURCE(S): CASREACT 145:124240

GI


I


II

AB Optically active cyclic amines of the formula I [A = (un)saturated, (un)substituted carbocycle or heterocycle; R0 = (un)substituted alkyl, alkenyl, or alkynyl; R = (un)substituted alkyl, alkenyl, alkynyl; R0 and A, or R and A, or R0 and R may also form rings, where R and the NH-R0 group on the two ring carbon atoms marked with an asterisk (*) in each case are arranged in cis arrangement to one another and the stereochem. configuration on these carbon atoms is different from the racemic configuration], or salts thereof, can be prepared effectively by a process, which comprises converting an imine (a racemic imine) of the formula II via hydrogenation in the presence of hydrogen or a hydrogen donor and a nonenzymic catalyst which comprises a catalytically active optically active complex of one or more transition metals from the group of ruthenium, rhodium, palladium, iridium, osmium, platinum, iron, nickel and samarium with organic ligands, to the compound of the formula I. The process may be carried out on in situ generated imines.

MSTR 1

G1—G3
4

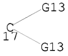
G1 = 25

G15—G2
1 25

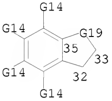
G2 = 26-1 27-4

N═G17
26 27

G3 = Ph
G12 = (0-6) 17



G15 = heterocycle <containing 1 or more heteroatoms,
zero or more N, zero or more O, zero or more S>
(opt. substd.)
G17 = 32-26 33-4



G19 = G12 / 67-35 68-33

O—CH2
67 68

Patent location: claim 1
Note: additional ring formation also claimed
Note: also incorporates claims 10 and 11
Stereochemistry: cis-stereo configuration for rings in G16 and G18

L4 ANSWER 3 OF 13 MARPAT COPYRIGHT 2008 ACS on STN
ACCESSION NUMBER: 143:483193 MARPAT
TITLE: Pharmaceutical compositions containing myricitrin or related compounds for treatment of sleeping disorders
INVENTOR(S): Chan, Hsiao Chang; Gou, Yu Lin; Rowlands, Dewi Kenneth; Chung, Yiu Wa
PATENT ASSIGNEE(S): Hong Kong
SOURCE: U.S. Pat. Appl. Publ., 43 pp.
CODEN: USXXCO
DOCUMENT TYPE: Patent
LANGUAGE: English

FAMILY ACC. NUM. COUNT: 1
PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
US 20050261167	A1	20051124	US 2005-129628	20050513
WO 2005115547	A2	20051208	WO 2005-US16783	20050513
WO 2005115547	A3	20070308		

W: AE, AG, AL, AM, AT, AU, AZ, BA, BB, BG, BR, BW, BY, BZ, CA, CH, CN, CO, CR, CU, CZ, DE, DK, DM, DZ, EC, EE, EG, ES, FI, GB, GD, GE, GH, GM, HR, HU, ID, IL, IN, IS, JP, KE, KG, KM, KP, KR, KZ, LC, LK, LR, LS, LT, LU, LV, MA, MD, MG, MK, MN, MW, MX, MZ, NA, NG, NI, NO, NZ, OM, PG, PH, PL, PT, RO, RU, SC, SD, SE, SG, SK, SL, SM, SY, TJ, TM, TN, TR, TT, TZ, UA, UG, US, UZ, VC, VN, YU, ZA, ZM, ZW

RW: BW, GH, GM, KE, LS, MW, MZ, NA, SD, SL, SZ, TZ, UG, ZM, ZW, AM, AZ, BY, KG, KZ, MD, RU, TJ, TM, AT, BE, BG, CH, CY, CZ, DE, DK, EE, ES, FI, FR, GB, GR, HU, IE, IS, IT, LT, LU, MC, NL, PL, PT, RO, SE, SI, SK, TR, BF, BJ, CF, CG, CI, CM, GA, GN, GQ, GW, ML, MR, NE, SN, TD, TG

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
EP 1750808	A2	20070214	EP 2005-750345	20050513

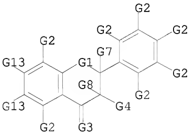
R: AT, BE, BG, CH, CY, CZ, DE, DK, EE, ES, FI, FR, GB, GR, HU, IE, IS, IT, LI, LT, LU, MC, NL, PL, PT, RO, SE, SI, SK, TR, AL, BA, HR, LV, MK, YU

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
CN 101001670	A	20070718	CN 2005-80015815	20050513
JP 2007538078	T	20071227	JP 2007-527316	20050513
KR 2007020036	A	20070216	KR 2006-724012	20061116
IN 2006CN04645	A	20070629	IN 2006-CN4645	20061218

PRIORITY APPLN. INFO.: US 2004-572528P 20040518
WO 2005-US16783 20050513

AB Provided herein is a composition that contains an effective amount of one or more compds. for treating, preventing, or ameliorating a disorder such as insomnia or another sleeping disorder and using the composition Mice were orally administered a mixture containing dihydromyricetin 75.46, myricetin 23.26, and myricitrin 1.27% 60 min prior to low dose injection of sodium pentobarbitone (12.5 mg/kg, i.p.). The mixture was able to significantly prolong pentobarbital induced-sleeping time.

MSTR 1



G1 = O
G2 = isocyano
G3 = 36

N—G2
36

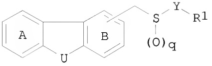
G8 = Ph (opt. substd.)
Patent location: claim 1

L4 ANSWER 4 OF 13 MARPAT COPYRIGHT 2008 ACS on STN
ACCESSION NUMBER: 143:422357 MARPAT
TITLE: Preparation of dibenzofuranylmethyl and benzodioxinylmethyl thioacetamides as well as analogs for use in the treatment of sleep disorders and related diseases
PATENT ASSIGNEE(S): Cephalon France, Fr.; Lesur, Brigitte; Yue, Christophe; Chasset, Sophie; Renault, Olivier
SOURCE: PCT Int. Appl., 120 pp.
CODEN: PIXXD2
DOCUMENT TYPE: Patent
LANGUAGE: English
FAMILY ACC. NUM. COUNT: 2
PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
WO 2005100345	A1	20051027	WO 2005-IB970	20050413
W: AE, AG, AL, AM, AT, AU, AZ, BA, BB, BG, BR, BW, BY, BZ, CA, CH, CN, CO, CR, CU, CZ, DE, DK, DM, DZ, EC, EE, EG, ES, FI, GB, GD, GE, GH, GM, HR, HU, ID, IL, IN, IS, JP, KE, KG, KM, KP, KR, KZ, LC, LK, LR, LS, LT, LU, LV, MA, MD, MG, MK, MN, MW, MX, MZ, NA, NI, NO, NZ, OM, PG, PH, PL, PT, RO, RU, SC, SD, SE, SG, SK, SL, SM, SY, TJ, TM, TN, TR, TT, TZ, UA, UG, US, UZ, VC, VN, YU, ZA, ZM, ZW				
RW: BW, GH, GM, KE, LS, MW, MZ, NA, SD, SL, SZ, TZ, UG, ZM, ZW, AM, AZ, BY, KG, KZ, MD, RU, TJ, TM, AT, BE, BG, CH, CY, CZ, DE, DK, EE, ES, FI, FR, GB, GR, HU, IE, IS, IT, LT, LU, MC, NL, PL, PT, RO, SE, SI, SK, TR, BF, BJ, CF, CG, CI, CM, GA, GN, GQ, GW, ML, MR, NE, SN, TD, TG				
EP 1589016	A1	20051026	EP 2004-290980	20040413
R: AT, BE, CH, DE, DK, ES, FR, GB, GR, IT, LI, LU, NL, SE, MC, PT, IE, SI, LT, LV, FI, RO, MK, CY, AL, TR, BG, CZ, EE, HU, PL, SK, HR				
US 20050282821	A1	20051222	US 2005-103951	20050412
US 7119214	B2	20061010		
AU 2005233373	A1	20051027	AU 2005-233373	20050413
CA 2562401	A1	20051027	CA 2005-2562401	20050413
EP 1735300	A1	20061227	EP 2005-734899	20050413
R: AT, BE, BG, CH, CY, CZ, DE, DK, EE, ES, FI, FR, GB, GR, HU, IE, IS, IT, LI, LT, LU, MC, NL, PL, PT, RO, SE, SI, SK, TR, AL, BA, HR, LV, MK, YU				
CN 1964965	A	20070516	CN 2005-80018321	20050413
JP 2007532627	T	20071115	JP 2007-507866	20050413
MX 2006PA11778	A	20070116	MX 2006-PA11778	20061011
PRIORITY APPLN. INFO.:			EP 2004-290980	20040413
			US 2004-569330P	20040507
			US 2005-103951	20050412
			WO 2005-IB970	20050413

OTHER SOURCE(S): CASREACT 143:422357

GI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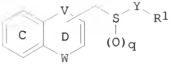
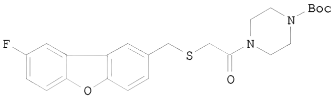

II


III

AB The invention relates to compds. I and II [wherein U, V, W = CH2, O, S; rings A, B and C are (un)substituted by halo, ph; ring D is (un)substituted by alkyl, Ph or heteroaryl; Y = (un)substituted alkylene; R1 = H, (un)substituted amine; q = 0-2, with limitations, and stereoisomeric forms, mixts. of stereoisomeric forms or pharmaceutically acceptable salt forms thereof], which are analogs of modafinyl, their use in the treatment of diseases such as sleepiness, and processes for their preparation For instance, amide III, which showed significantly greater wake promoting activity than the control vehicle in rats (AUC 0-3h mean value 132.0 vs. 73.6), was synthesized by EDCI/HOBt-mediated coupling of the corresponding acid with N-Boc-piperazine.

MSTR 1

$G26-CH_2-\underset{2}{G1}-G8-\underset{94}{G12}$

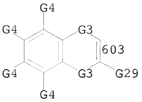
G3 = O / 492

$\underset{492}{C}=G7$

G7 = 494

$\underset{494}{N}-G24$

G24 = NH2 (opt. substd.)
G26 = 603



G29 = Ph
Patent location: claim 1
Note: substitution is restricted
Note: or pharmaceutically acceptable salts
Stereochemistry: and stereoisomeric forms

REFERENCE COUNT: 15 THERE ARE 15 CITED REFERENCES AVAILABLE FOR THIS RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT

L4 ANSWER 5 OF 13 MARPAT COPYRIGHT 2008 ACS on STN
ACCESSION NUMBER: 143:422356 MARPAT
TITLE: Preparation of dibenzofuranylmethyl and benzodioxinylmethyl thioacetamides as well as analogs for use in the treatment of sleep disorders and related diseases
INVENTOR(S): Lesur, Brigitte; Yue, Christophe; Chasset, Sophie
PATENT ASSIGNEE(S): Cephalon France, Fr.
SOURCE: Eur. Pat. Appl., 73 pp.
CODEN: EPXXDW
DOCUMENT TYPE: Patent
LANGUAGE: English
FAMILY ACC. NUM. COUNT: 2
PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
EP 1589016	A1	20051026	EP 2004-290980	20040413
R: AT, BE, CH, DE, DK, ES, FR, GB, GR, IT, LI, LU, NL, SE, MC, PT, IE, SI, LT, LV, FI, RO, MK, CY, AL, TR, BG, CZ, EE, HU, PL, SK, HR				
US 20050282821	A1	20051222	US 2005-103951	20050412
US 7119214	B2	20061010		
AU 2005233373	A1	20051027	AU 2005-233373	20050413
CA 2562401	A1	20051027	CA 2005-2562401	20050413
WO 2005100345	A1	20051027	WO 2005-IB970	20050413
W: AE, AG, AL, AM, AT, AU, AZ, BA, BB, BG, BR, BW, BY, BZ, CA, CH, CN, CO, CR, CU, CZ, DE, DK, DM, DZ, EC, EE, EG, ES, FI, GB, GD, GE, GH, GM, HR, HU, ID, IL, IN, IS, JP, KE, KG, KM, KP, KR, KZ, LC, LK, LR, LS, LT, LU, LV, MA, MD, MG, MK, MN, MW, MX, MZ, NA, NI, NO, NZ, OM, PG, PH, PL, PT, RO, RU, SC, SD, SE, SG, SK, SL, SM, SY, TJ, TM, TN, TR, TT, TZ, UA, UG, US, UZ, VC, VN, YU, ZA, ZM, ZW				
RW: BW, GH, GM, KE, LS, MW, MZ, NA, SD, SL, SZ, TZ, UG, ZM, ZW, AM, AZ, BY, KG, KZ, MD, RU, TJ, TM, AT, BE, BG, CH, CY, CZ, DE, DK, EE, ES, FI, FR, GB, GR, HU, IE, IS, IT, LT, LU, MC, NL, PL, PT, RO, SE, SI, SK, TR, BF, BJ, CF, CG, CI, CM, GA, GN, GQ, GW, ML, MR, NE, SN, TD, TG				
EP 1735300	A1	20061227	EP 2005-734899	20050413

R: AT, BE, BG, CH, CY, CZ, DE, DK, EE, ES, FI, FR, GB, GR, HU, IE, IS, IT, LI, LT, LU, MC, NL, PL, PT, RO, SE, SI, SK, TR, AL, BA, HR, LV, MK, YU

CN 1964965	A	20070516	CN 2005-80018321	20050413
JP 2007532627	T	20071115	JP 2007-507866	20050413
US 20060241119	A1	20061026	US 2006-473153	20060621
MX 2006PA11778	A	20070116	MX 2006-PA11778	20061011
PRIORITY APPLN. INFO.:			EP 2004-290980	20040413
			US 2004-569330P	20040507
			US 2005-103951	20050412
			WO 2005-IB970	20050413

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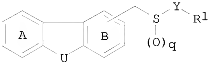

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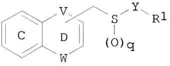
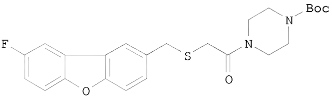


II



III

AB The invention relates to compds. I and II [wherein U, V, W = CH2, O, S; rings A, B and C are (un)substituted by halo, ph; ring D is (un)substituted by alkyl, Ph or heteroaryl; Y = (un)substituted alkylene; R1 = H, (un)substituted amine; q = 0-2, with limitations, and stereoisomeric forms, mixts. of stereoisomeric forms or pharmaceutically acceptable salt forms thereof], which are analogs of modafinyl, their use in the treatment of diseases such as sleepiness, and processes for their preparation For instance, amide III, which showed significantly greater wake promoting activity than the control vehicle in rats (AUC 0-3h mean value 132.0 vs. 73.6), was synthesized by EDCI/HOBt-mediated coupling of the corresponding acid with N-Boc-piperazine.

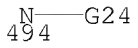
MSTR 1

G26—CH2—G1—G8—G12
(G1 = 2, G12 = 94)

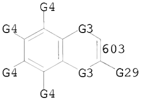
G3 = O / 492

C(492)═G7

G7 = 494



G24 = NH2 (opt. substd.)
G26 = 603



G29 = Ph
Patent location: claim 1
Note: substitution is restricted
Note: or pharmaceutically acceptable salts
Stereochemistry: and stereoisomeric forms

REFERENCE COUNT: 18 THERE ARE 18 CITED REFERENCES AVAILABLE FOR THIS RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT

L4 ANSWER 6 OF 13 MARPAT COPYRIGHT 2008 ACS on STN
ACCESSION NUMBER: 140:406680 MARPAT
TITLE: Preparation of aminated isoflavonoid derivatives for use in pharmaceutical compositions
INVENTOR(S): Kelly, Graham Edmund; Heaton, Andrew; Faragalla, Jane; Bremner, John
PATENT ASSIGNEE(S): Novogen Research Pty. Ltd., Australia
SOURCE: PCT Int. Appl., 60 pp.
CODEN: PIXXD2
DOCUMENT TYPE: Patent
LANGUAGE: English
FAMILY ACC. NUM. COUNT: 1
PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
WO 2004039793	A1	20040513	WO 2003-AU1446	20031103
W: AE, AG, AL, AM, AT, AU, AZ, BA, BB, BG, BR, BW, BY, BZ, CA, CH, CN, CO, CR, CU, CZ, DE, DK, DM, DZ, EC, EE, EG, ES, FI, GB, GD, GE, GH, GM, HR, HU, ID, IL, IN, IS, JP, KE, KG, KP, KR, KZ, LC, LK, LR, LS, LT, LU, LV, MA, MD, MG, MK, MN, MW, MX, MZ, NI, NO, NZ, OM, PG, PH, PL, PT, RO, RU, SC, SD, SE, SG, SK, SL, SY, TJ, TM, TN, TR, TT, TZ, UA, UG, US, UZ, VC, VN, YU, ZA, ZM, ZW				
RW: BW, GH, GM, KE, LS, MW, MZ, SD, SL, SZ, TZ, UG, ZM, ZW, AM, AZ, BY, KG, KZ, MD, RU, TJ, TM, AT, BE, BG, CH, CY, CZ, DE, DK, EE, ES, FI, FR, GB, GR, HU, IE, IT, LU, MC, NL, PT, RO, SE, SI, SK, TR, BF, BJ, CF, CG, CI, CM, GA, GN, GQ, GW, ML, MR, NE, SN, TD, TG				
CA 2504653	A1	20040513	CA 2003-2504653	20031103
AU 2003277969	A1	20040525	AU 2003-277969	20031103
EP 1556368	A1	20050727	EP 2003-769053	20031103
R: AT, BE, CH, DE, DK, ES, FR, GB, GR, IT, LI, LU, NL, SE, MC, PT, IE, SI, LT, LV, FI, RO, MK, CY, AL, TR, BG, CZ, EE, HU, SK				

CN 1708490	A	20051214	CN 2003-80102565	20031103
JP 2006513997	T	20060427	JP 2004-547289	20031103
NZ 539034	A	20080430	NZ 2003-539034	20031103
MX 2005PA04526	A	20050726	MX 2005-PA4526	20050427
NO 2005002524	A	20050526	NO 2005-2524	20050526
US 20060100238	A1	20060511	US 2005-532074	20051128
PRIORITY APPLN. INFO.:			AU 2002-952453	20021101
			WO 2003-AU1446	20031103

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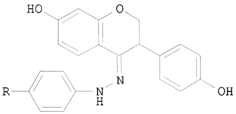
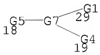


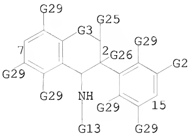
I

AB Aminated isoflavonoids, such as I [R = H, NO2, Me], were synthesized by aminating the 4-keto group of an isoflavanone. Claimed uses for these aminated isoflavanoids include treatment, prevention or amelioration of diseases associated with aberrant cell survival, aberrant cell proliferation, abnormal cellular migration, abnormal angiogenesis, abnormal estrogen/androgen balance, dysfunctional or abnormal steroid genesis, degeneration including degenerative changes within blood vessel walls, inflammation and immunol. imbalance and for inducing apoptosis in cells expressing abnormal prosurvival phenotype, inhibiting migration of cells having an abnormal cellular migration phenotype, and inhibiting angiogenesis in tissue expressing aberrant angiogenic phenotype. Thus, isoflavonoid I (R = H) was prepared by reacting dihydrodaidzein with phenylhydrazine hydrochloride using NaOAc in MeOH. The prepared isoflavonoid derivs. were assayed for cytotoxicity against cancer cell lines, such as prostate LNCaP and DU-145 and lung carcinoma NCI-H460, for androgen inhibition, for inhibition of thromboxane synthase and COX.

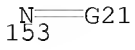
MSTR 1



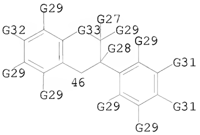
G7 = 7-18 2-29 15-19



G13 = 153



G21 = 46

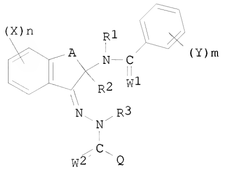


G33 = O
Patent location: claim 1
Note: or pharmaceutically acceptable salts
Note: substitution is restricted
Note: additional ring formation also claimed

L4 ANSWER 7 OF 13 MARPAT COPYRIGHT 2008 ACS on STN
ACCESSION NUMBER: 136:401543 MARPAT
TITLE: Preparation of hydrazono(tetrahydronaphthalenyl)benzamides and insecticides and acaricides
INVENTOR(S): Mita, Takeshi; Masuzawa, Tadahide; Io, Tomoaki; Miyake, Toshiro; Takii, Shinji; Ito, Toshiki
PATENT ASSIGNEE(S): Nissan Chemical Industries, Ltd., Japan
SOURCE: Jpn. Kokai Tokkyo Koho, 113 pp.
CODEN: JKXXAF
DOCUMENT TYPE: Patent
LANGUAGE: Japanese
FAMILY ACC. NUM. COUNT: 1
PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
JP 2002155044	A	20020528	JP 2000-352333	20001120
PRIORITY APPLN. INFO.:			JP 2000-352333	20001120

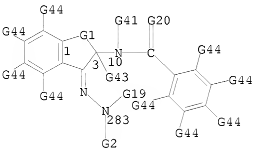
GI



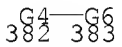
I

AB The compds. I [A = CH2, CH2CH2, OCH2, S(O)pCH2, NR4CH2, etc.; Q = H, C1-12 alkyl, C1-12 haloalkyl, C3-12 cycloalkyl, etc.; W1, W2 = O, S; X, Y = H, halo, cyano, SCN, SF5, etc.; R1 = H, C1-6 alkyl, C1-6 haloalkyl, C3-6 cycloalkyl, etc.; R2, R3 = H, C1-6 alkyl, C1-6 haloalkyl, C1-6 alkoxy(C1-4 alkyl), etc.; m = 1-4; n = 1-5; p = 0-2] or their salts are prepared N-[(6-chloro-1-hydrazono)-1,2,3,4-tetrahydronaphthalen-2-yl]benzamide (0.50 g) was treated with butyryl chloride in the presence of pyridine in AcOEt at 0° to room temperature overnight to give 0.42 g N-[1-(N'-butyrylhydrazono)-6-chloro-1,2,3,4-tetrahydronaphthalen-2-yl]benzamide showing 80% insecticidal activity to Spodoptera litura.

MSTR 1



G1 = 382-1 383-3



G4 = O
G6 = (1-2) CH2
G43 = Ph (opt. substd.)
Patent location: claim 1
Note: or salts
Note: additional ring formation also claimed

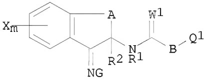
L4 ANSWER 8 OF 13 MARPAT COPYRIGHT 2008 ACS on STN
ACCESSION NUMBER: 135:5616 MARPAT
TITLE: Preparation of hydrazone compounds and pesticides
INVENTOR(S): Mita, Takeshi; Ohtsu, Tadashi; Hotta, Hiroyasu; Io, Tomoaki; Ueno, Hideki; Masuzawa, Yoshihide; Miyake, Toshiro; Mimori, Norihiko; Takii, Shinji; Itoh, Toshinori
PATENT ASSIGNEE(S): Nissan Chemical Industries, Ltd., Japan
SOURCE: PCT Int. Appl., 409 pp.
CODEN: PIXXD2
DOCUMENT TYPE: Patent
LANGUAGE: Japanese
FAMILY ACC. NUM. COUNT: 1
PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
WO 2001036381	A1	20010525	WO 2000-JP8016	20001114

W: AE, AG, AL, AU, BA, BB, BG, BR, BZ, CA, CN, CR, CU, CZ, DM, DZ, EE, GD, GE, HR, HU, ID, IL, IN, IS, JP, KR, LC, LK, LR, LT, LV, MA, MG, MK, MN, MX, NO, NZ, PL, RO, SG, SI, SK, TT, UA, US, UZ, VN, YU, ZA, AM, AZ, BY, KG, KZ, MD, RU, TJ, TM
RW: GH, GM, KE, LS, MW, MZ, SD, SL, SZ, TZ, UG, ZW, AT, BE, CH, CY, DE, DK, ES, FI, FR, GB, GR, IE, IT, LU, MC, NL, PT, SE, TR, BF, BJ, CF, CG, CI, CM, GA, GN, GW, ML, MR, NE, SN, TD, TG

PRIORITY APPLN. INFO.:
JP 1999-323698 19991115
JP 1999-323699 19991115
JP 2000-298021 20000929
JP 2000-301562 20001002

GI

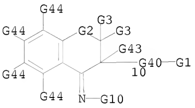


I

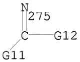
AB Hydrazone compds. such as hydrazono-1,2,3,4-tetrahydronaphthalene, hydrazonoindoline, or hydrazochroman, resented by general formula (I) or salts thereof [wherein A = CH2, CH2CH2, OCH2, S(O)pCH2, S(O)pCH2CH2, or CH2 S(O)pCH2 (wherein p = 0-2), N-(un)substituted NHCH2, NHCH2CH2, or CH2NHCH2, (CH2)3, OCH2CH2; B = a single bond, O, S, (un)substituted NH, CO; G = -N:C(R5)NR6R7 (G-1), -N(R8)C(:W2)Q2 (G-2), -N:C(R5)W3-R9 (G-3); when B = O, S, (un)substituted NH, CO, G-1, or G-3, then Q1 = (halo)alkyl, (halo)cycloalkyl, (halo)alkenyl, (halo)alkynyl, (halo)cycloalkenyl, (un)substituted Ph, aromatic or aliphatic heterocyclyl, etc.; when B = a single bond and G = G-2, then Q1 = (halo)alkyl, (halo)cycloalkyl, (halo)alkenyl, (halo)alkynyl, (halo)cycloalkenyl, etc.; when B = a single bond or (un)substituted NH, then Q1 = H; Q2 = H, (halo)alkyl, (halo)cycloalkyl, (halo)alkenyl, (halo)alkynyl, (halo)cycloalkenyl, alkoxycarbonyl, (un)substituted benzoyl or Ph, aromatic or aliphatic heterocyclyl, etc.; W1, W2 = O, S; W3 = O, S, CH2; X = H, halo, cyano, isocyanato, NO2, N3, CHO,

CO2H, (un)substituted carbamoyl, OH, SH, etc.; R1 = H, (halo)alkyl, cycloalkyl, cycloalkylalkyl, (halo)alkoxyalkyl, alkoxyalkoxyalkyl, benzyloxyalkyl, (halo)alkylthioalkyl, etc.; R2 = H, (halo)alkyl, alkoxyalkyl, alkylthioalkyl, cyanoalkyl, alkoxycarbonyl, (halo)alkenyl, etc.; m = 1-4] are prepared Novel agricultural chems., in particular, insecticides and miticides containing these compds. as the active ingredient formula I are also claimed. Thus, a solution of tert-Bu 6-chloro-1-hydrazono-1,2,3,4-tetrahydronaphthalen-2-ylcarbamate and N,N-dimethylacetamide di-Me acetal in toluene was refluxed for 4 h to give tert-Bu 6-chloro-1-[1-(dimethylamino)ethylidenehydrazono]-1,2,3,4-tetrahydronaphthalen-2-ylcarbamate (II). II at 500 ppm controlled ≥80% Spodoptera litura larvae on cabbage leaves.

MSTR 1B



G2 = O
G10 = 275



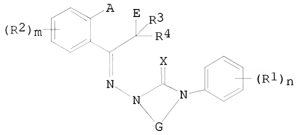
G43 = Ph (opt. substd.)
Patent location: claim 1
Note: or salts

REFERENCE COUNT: 9 THERE ARE 9 CITED REFERENCES AVAILABLE FOR THIS RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT

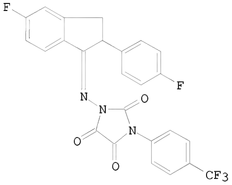
L4 ANSWER 9 OF 13 MARPAT COPYRIGHT 2008 ACS on STN
ACCESSION NUMBER: 120:164173 MARPAT
TITLE: Arthropodicidal imidazolidines and analogs and their preparation
INVENTOR(S): Lowder, Patrick Doyle
PATENT ASSIGNEE(S): du Pont de Nemours, E. I., and Co., USA
SOURCE: PCT Int. Appl., 38 pp.
CODEN: PIXXD2
DOCUMENT TYPE: Patent
LANGUAGE: English
FAMILY ACC. NUM. COUNT: 1
PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
WO 9322289	A1	19931111	WO 1992-US11332	19921230

W: JP, US
RW: AT, BE, CH, DE, DK, ES, FR, GB, GR, IE, IT, LU, MC, NL, PT, SE
PRIORITY APPLN. INFO.: US 1992-879046 19920506
GI



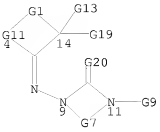
I



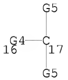
II

AB Arthropodicidal compds. I [A = H; E = H, alkyl; or AE = (CH2)t, O, S(O)q, OCH2, CH2O, CH2S(O)q, S(O)qCH2, NR5 (CH2 units may be substituted); G = COCO, CONR6CO, COCR7R8CO, CR7R8CR9R10, COCR7R8, CR7R8CO; R1, R2 = H, halo, cyano, NO2, N3, OH and derivs., alkoxy, CO2H and derivs., amino, etc.; R3 = H, (un)substituted alkyl, alkenyl, alkynyl, OH, CO2H, Ph, CH2Ph, etc.; R4 = H, (un)substituted alkyl, alkenyl, alkynyl, Ph, CH2Ph; R5 = H, alkyl, various organic and inorg. acyl; R6-R10 = H, alkyl; X = O, S; m = 1-4; n = 1-5; q = 0-2] are claimed, as well as their arthropodicidal compns. and use. Tables of over 1000 possible I are given, and m.p. data are shown for 5 of them. For example, compound II was prepared by cyclocondensation of oxalyl chloride with the corresponding hydrazinecarboxamide derivative to form the imidazolidinetrione nucleus. The triazinetrione analog of II was similarly prepared using ClCON:C:O. Applied at a rate of approx. 0.55 kg/ha, II gave ≥80% mortality of larval Spodoptera frugiperda, Heliothis virescens, Diabrotica undecimpunctata howardi, and Anthonomus grandis, but not Mascrosteles fascifrons.

MSTR 1A



G1 = 16-4 17-14

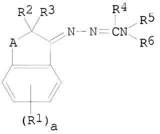


G4 = O
G11 = o-C6H4 (opt. substd. by G21)
G13 = Ph (opt. substd. by 1 or more G24)
Patent location: claim 1

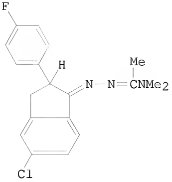
L4 ANSWER 10 OF 13 MARPAT COPYRIGHT 2008 ACS on STN
ACCESSION NUMBER: 120:163733 MARPAT
TITLE: Hydrazone derivative insecticides and/or acaricides containing the same as active ingredient and intermediate compounds thereof
INVENTOR(S): Taki, Toshiaki; Kisida, Hirosi; Saito, Shigeru; Isayama, Shinji
PATENT ASSIGNEE(S): Sumitomo Chemical Co., Ltd., Japan
SOURCE: Eur. Pat. Appl., 96 pp.
CODEN: EPXXDW
DOCUMENT TYPE: Patent
LANGUAGE: English
FAMILY ACC. NUM. COUNT: 1
PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
EP 567138	A2	19931027	EP 1993-106584	19930422
EP 567138	A3	19940112		
R: CH, DE, ES, FR, GB, IT, LI, NL				
CA 2094333	A1	19931024	CA 1993-2094333	19930419
US 5451607	A	19950919	US 1993-47490	19930419
JP 06056754	A	19940301	JP 1993-94674	19930421
BR 9301628	A	19931026	BR 1993-1628	19930422
AU 9337063	A	19931028	AU 1993-37063	19930422
AU 657215	B2	19950302		

PRIORITY APPLN. INFO.: JP 1992-131616 19920423
GI



I



II

AB The title compds. I [A = (CH2)t, O, S(O)n, OCH2, (un)substituted NH, etc.; n = 0-2; t = 1-3; R1 = halogen, CN, NO2, azide, etc.; R2 = H, C1-6 alkyl, C1-6 haloalkyl, C3-6 cycloalkyl, C2-6 alkenyl, (un)substituted Ph, etc.; R3 = H, C1-6 alkyl, C1-6 haloalkyl, C2-6 alkenyl, C2-6 haloalkenyl, C2-6 alkynyl, etc.; R4 = H, C1-6 alkyl, C1-6 haloalkyl; R5 = C1-6 alkyl, C1-6 haloalkyl, C2-6 alkenyl, C2-6 haloalkenyl, C2-6 alkynyl, etc.; R6 = H, C1-6 alkyl, C2-6 haloalkyl, C2-6 alkenyl, C2-6 cyanoalkyl, etc.; a = 1-4], useful as insecticides and/or acaricides, are prepared Thus, 5-chloro-2-(4-fluorophenyl)-2,3-dihydro-1H-inden-1-ylidene hydrazone was reacted with N,N-dimethylacetamide dimethylacetal, producing hydrazone II, m.p. 133.6°, which demonstrated 100% mortality against tobacco cutworm (Spodoptera litura) at 500 ppm.

MSTR 1

G44=N—G48

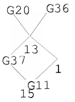
G11 = o-C6H4 (opt. substd. by G12)
G20 = 113

G28—G30
113

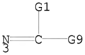
G28 = phenylene (opt. substd. by G29)
G37 = 151-15 152-13

G39—G40
151 152

G39 = O
G40 = CH2 (opt. substd.)
G44 = 1



G48 = 3

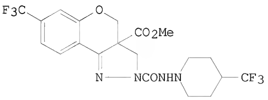


Patent location: claim 1
Note: additional ring formation allowed
Note: also incorporates claims 19 and 20

L4 ANSWER 11 OF 13 MARPAT COPYRIGHT 2008 ACS on STN
ACCESSION NUMBER: 120:134465 MARPAT
TITLE: Agrochemical arthropodicidal heterocyclic amide derivatives
INVENTOR(S): Lowder, Patrick Doyle
PATENT ASSIGNEE(S): du Pont de Nemours, E. I., and Co., USA
SOURCE: PCT Int. Appl., 93 pp.
CODEN: PIXXD2
DOCUMENT TYPE: Patent
LANGUAGE: English
FAMILY ACC. NUM. COUNT: 1
PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
WO 9318038	A1	19930916	WO 1993-US1532	19930226
W: JP, US				
RW: AT, BE, CH, DE, DK, ES, FR, GB, GR, IE, IT, LU, MC, NL, PT, SE				
EP 629201	A1	19941221	EP 1993-906122	19930226
R: DE, ES, FR, GB, IT				
JP 07504658	T	19950525	JP 1993-515715	19930226
PRIORITY APPLN. INFO.:			US 1992-843378	19920302
			WO 1993-US1532	19930226

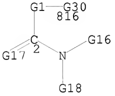
GI



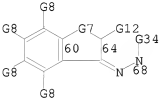
I

AB The title compds. X:C(Q)N(G)Y [G = (un)substituted cyclohexyl, (un)substituted 1-piperidinyl, etc.; Q = (un)substituted phenyldihydropyrazolyl, phenylheterocyclyl, etc.; X = O, S; Y = H, C1-6 alkyl, PhCH2, C2-6 alkenyl, C2-6 alkynyl, etc.], useful as agrochem. arthropodicides, are prepared Thus, benzopyranopyrazole I, m.p. 219-220°, was prepared from Me 2,3,3a,4-tetrahydro-7-(trifluoromethyl)-[1]-benzopyrano[4,3-c]pyrazole-3a-carboxylate hydrochloride in four steps.

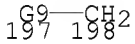
MSTR 1A



G1 = 68-2 64-816



G7 = 197-60 198-64



G9 = O
G30 = Ph (opt. substd.)
Patent location: claim 1
Note: additional ring formation specified
Note: substitution is restricted

L4 ANSWER 12 OF 13 MARPAT COPYRIGHT 2008 ACS on STN
ACCESSION NUMBER: 117:26559 MARPAT
TITLE: Preparation of arthropodicidal benzopyranopyrazolecarboxamides, -carboxylates, and related compounds
INVENTOR(S): Harrison, Charles Richard; Lett, Renee Marie; McCann, Stephen Frederick; Shapiro, Rafael; Stevenson, Thomas Martin
PATENT ASSIGNEE(S): du Pont de Nemours, E. I., and Co., USA
SOURCE: PCT Int. Appl., 291 pp.

CODEN: PIXXD2
DOCUMENT TYPE: Patent
LANGUAGE: English
FAMILY ACC. NUM. COUNT: 2
PATENT INFORMATION:

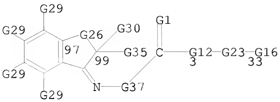
PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
WO 9203421	A2	19920305	WO 1991-US5334	19910801
WO 9203421	A3	19921029		
W: JP, US				
RW: AT, BE, CH, DE, DK, ES, FR, GB, GR, IT, LU, NL, SE				
EP 543930	A1	19930602	EP 1991-916421	19910801
R: DE, ES, FR, GB, IT				
JP 06500333	T	19940113	JP 1991-515611	19910801
US 5474998	A	19951212	US 1993-971974	19930216
PRIORITY APPLN. INFO.:			US 1990-569044	19900817
			US 1990-573954	19900827
			US 1990-595151	19901009
			WO 1991-US5334	19910801

GI

* STRUCTURE DIAGRAM TOO LARGE FOR DISPLAY - AVAILABLE VIA OFFLINE PRINT *

AB The title compds. QC(:X)N(Y)G and QC(X1)(:NG) [Q = Q1-Q5; A = CH2, CH2CH2, O, S, NR5, etc.; G = (un)substituted pyridinyl, -pyrimidinyl, -phenyl(amino), etc.; X = O, S, NX2; X1 = Cl, Br, OR6, etc.; X2 = HO, cyano, SO2Ph, R6, etc.; Y, Y1 = H, C1-6 alkyl(thio), C2-6 alkoxycarbonyl, PhCH2, CHO, etc.; Z (un)substituted = (CH2)q, CH2OCH2, etc.; V = O, S, NR5, R2 = H, C1-6 (halo)alkyl, C2-6 (halo)alkenyl, cyano, NO2, etc.; R3 = Ra, Rb, J; Ra = H, C1-6 (halo)alkyl; Rb = cyano, azido, etc.; J = (un)saturated 5- or 6-membered (un)substituted heteroring; R4 = H, C1-6 (halo)alkyl, (un)substituted Ph, etc.; R5 = H, C1-6 (halo)alkyl, S(O)R15, etc.; R6 = C1-3 alkyl, (un)substituted benzyl, etc.; R15 = H, C1-6 (halo)alkyl, (un)substituted Ph, etc.; R18 = H, C1-4 (halo)alkyl, C4-7 alkylcycloalkyl, etc.; R19 = H, C1-3 alkyl, CO2R15, etc.; R32 = H, Me, CO2Me; n = 1-3, q = 2-4; with a proviso] were prepared as pesticides. Condensation of 2-acetyl-5-chlorothiophene with MeMgBr in Et2O followed by dehydration of the intermediate carbinol gave 2-chloro-5-(1-methylethenyl)thiophene. This was chlorinated by NBS/(PhSe)2 in CH2Cl2/pyridine, the mixture of the resulting vinylic and allylic chlorides in DMF was etherified with 4,2-CF3(HO)C6H3CHO, and the product chromatographed to give 2-[[2-(5-chloro-2-thienyl)-2-propenyl]oxy]-4-(trifluoromethyl)benzaldehyde. The aldehyde was condensed with (EtO)2P(O)NHNH2 in EtOH, the hydrazide cyclized by NBS/Et3N in CH2Cl2, the resulting (benzopyranopyrazolyl)phosphonate was dephosphorylated by Me3SiCl in EtOH, and condensed with 4-CF3C6H4NCO in CH2Cl2 to give title compound (I). I at .apprx.0.55 kg/ha killed ≥80% 3d-instar larvae of Spodoptera frugiperda, Heliothis virescens, and Diabrotica undecimpunctata.

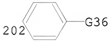
MSTR 1C



G26 = 109-97 110-99

G27—CH2
109 110

G27 = O
G35 = 202



G37 = NH (opt. substd.)
Patent location: claim 1
Note: substitution is restricted

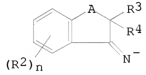
L4 ANSWER 13 OF 13 MARPAT COPYRIGHT 2008 ACS on STN
ACCESSION NUMBER: 114:228735 MARPAT
TITLE: Preparation of indenylidene- and heterocyclylidene(phenylaminocarbonyl)hydrazines as anthropodicides
INVENTOR(S): Daub, John Powell; Lahm, George Philip; Marlin, Bradford Senn
PATENT ASSIGNEE(S): du Pont de Nemours, E. I., and Co., USA
SOURCE: Eur. Pat. Appl., 159 pp.
CODEN: EPXXDW
DOCUMENT TYPE: Patent
LANGUAGE: English
FAMILY ACC. NUM. COUNT: 1
PATENT INFORMATION:

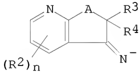
PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
EP 377304	A2	19900711	EP 1989-313369	19891220
EP 377304	A3	19900725		
EP 377304	B1	19940309		
R: GR				
CA 2005740	A1	19900627	CA 1989-2005740	19891215
WO 9007495	A1	19900712	WO 1989-US5597	19891220
W: AU, BB, BG, BR, DK, FI, HU, JP, KR, LK, MC, MG, MW, NO, RO, SD, SU, US				
RW: AT, BE, BF, BJ, CF, CG, CH, CM, DE, ES, FR, GA, GB, IT, LU, ML, MR, NL, SE, SN, TD, TG				
AU 9050246	A	19900801	AU 1990-50246	19891220
AU 632093	B2	19921217		

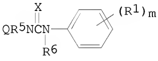
EP 452406	A1	19911023	EP 1990-902098	19891220
R: AT, BE, CH, DE, ES, FR, GB, IT, LI, LU, NL, SE				
BR 8907842	A	19911203	BR 1989-7842	19891220
HU 58695	A2	19920330	HU 1990-1521	19891220
AT 102606	T	19940315	AT 1989-313369	19891220
ES 2062049	T3	19941216	ES 1989-313369	19891220
RU 2067092	C1	19960927	RU 1989-4895829	19891220
CN 1043935	A	19900718	CN 1989-109410	19891223
IL 92870	A	19940530	IL 1989-92870	19891225
ZA 8909916	A	19910828	ZA 1989-9916	19891227
WO 9107382	A1	19910530	WO 1990-US3347	19900620
W: JP, KR				
JP 05501556	T	19930325	JP 1990-515832	19900620
JP 2894363	B2	19990524		
JP 04502472	T	19920507	JP 1990-502795	19901219
US 5182303	A	19930126	US 1991-689042	19910520
DK 9101219	A	19910621	DK 1991-1219	19910621
US 5268388	A	19931207	US 1992-971008	19921102
US 5428027	A	19950627	US 1993-142568	19931028
PRIORITY APPLN. INFO.:			US 1988-290404	19881227
			US 1989-436361	19891113
			EP 1989-313369	19891220
			WO 1989-US5597	19891220
			WO 1990-US3347	19900620
			US 1991-689042	19910520
			US 1992-971008	19921102

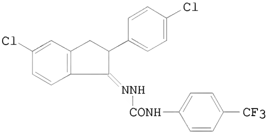
OTHER SOURCE(S): CASREACT 114:228735

GI

Q1=


Q2=


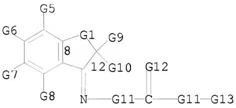

I


II

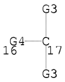
AB The title compds. I [Q = Q1, Q2, etc.; A = O, OCH2, (CH2)t, etc.; t = 0-3; R1,R2 = halo, NO2, N3, SCN, etc.; R3 = H, C1-6 alkyl, haloalkyl, C4-6 alkylcycloalkyl, C2-6 alkenyl, haloalkenyl, alkynyl, etc.; R5, R6 = H, C1-22 alkyl, C2-22 alkoxyalkyl, alkylcarbonyl, etc.; X = O, S; m = 1-5; n = 1-4], were prepared Condensation of 5-chloro-2-(4-chlorophenyl)-2,3-dihydro-1H-inden-1-one with hydrazine hydrate in EtOH, followed by reaction with 4-trifluoromethylphenyl isocyanate, gave hydrazinecarboxamide II. II at 0.55 kg/ha gave complete

kill of Spodoptera frugiperda larvae.

MSTR 1A



G1 = 16-8 17-12




```
G4      = O
G9      = Ph (opt. substd.)
G11     = NH
Patent location:            claim 1
Note:                       authors claim additional ring formation


=> d his

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     FILE 'REGISTRY' ENTERED AT 15:32:23 ON 04 DEC 2008
L1                STRUCTURE UPLOADED
L2            37 S L1 FULL

     FILE 'CA' ENTERED AT 15:32:39 ON 04 DEC 2008
L3            12 S L2

     FILE 'MARPAT' ENTERED AT 15:32:57 ON 04 DEC 2008
L4            13 S L1 FULL

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---Logging off of STN---



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Executing the logoff script...


=> LOG Y
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STN INTERNATIONAL LOGOFF AT 15:33:55 ON 04 DEC 2008